

Let Us Debate! A Proposal to Promote Social Entrepreneurship in Physical Education Teacher Education.

Carlos Capella-Peris^{ab*}, Oscar Chiva-Bartoll^b, Celina Salvador-García^c and María Maravé-Vivas^d

^aDepartment of Teacher Education and Professional Development, Morgan State University, Baltimore, MD, United States. ^bDepartment of Education and Didactics of Specific Subjects, Universitat Jaume I, Castellón, Spain. ^cFaculty of Education, International University of La Rioja, Logroño, Spain. ^dDepartment of Pedagogy and Didactics of Social Sciences, Language and Literature, Universitat Jaume I, Castellón, Spain.

*Corresponding author. Email: capellac@uji.es,

Carlos Capella-Peris, PhD, MSed. Av/ Vicent Sos Baynat, s/n, 12071 Castelló de la Plana, Castelló (SPAIN). Phone: +34 964 72 96 84. Email: capellac@uji.es. ORCID iD: 0000-0003-2520-0650. Assistant Professor specialized in Physical Education, Active Learning, and Social Entrepreneurship.

Òscar Chiva-Bartoll, PhD, MSed. ORCID iD: 0000-0001-7128-3560. Email: ochiva@uji.es. Associate Professor specialized in Physical Education, Teacher Education and Active Methodologies.

Celina Salvador-García, PhD, MSed. ORCID iD: 0000-0003-0776-8760. Email: salvadoc@uji.es. Teaching Assistant specialized in Teacher Education, Content and Language Integrated Learning and Physical Education.

María Maravé-Vivas, PhD, MSed. ORCID iD: 0000-0003-2668-014X. Email:

marave@uji.es. Teaching Assistant specialized in Teacher Education, Service Learning and

Physical Education.

- 1 Let Us Debate! A Proposal to Promote Social Entrepreneurship in Physical Education
- 2 Teacher Education

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

Abstract

Purpose: To analyze the effects of debates on social entrepreneurship (SE) in physical education teacher education students ($n=38$) from an urban university. Participants discussed the role that society, social class, gender, race, and violence play in sports. **Method:** A convergent parallel mixed-methods design with methodological triangulation was employed: QUAN+QUAL. **Results:** The quantitative results provide evidence regarding the positive effect of debates on SE. The qualitative analysis complements this outcome by describing how SE was developed, for example, facing a new teaching methodology, being challenged by peers and/or the teacher, analyzing different opinions and their implications, developing new arguments for discussion, discussing topics according to the students' interests, and leading the conversation while debating. Data transformation and sentiment analyses provide supplemental information regarding the benefits provided. **Discussion/Conclusion:** Our results display how debates improve SE in physical education teacher education students, calling for new research in this direction.

Keywords: urban education, social effects, physical education, scale, mixed-methods.

18 Let Us Debate! A Proposal to Promote Social Entrepreneurship in Physical Education
19 Teacher Education

20 Active learning (AL) is a teaching methodology that can enhance students' learning
21 by engaging them in processes of analysis, discussion, and application rather than passively
22 receiving information (Miller & Metz, 2014). Debate is an AL method where students discuss
23 a variety of viewpoints, taking a stance on an issue using evidence-based literature,
24 persuasive communication, and logic to lead others to an agreement (McGee et al., 2020).
25 Debating as a teaching strategy dates back over 2,400 years to Protagoras (481-411 BC) in
26 Athens (Snider & Schnurer, 2006). However, there was renewed attention to debates in the
27 1980s through an increasing interest in promoting students' critical thinking skills (Garrett et
28 al., 1996). Research shows a range of productive uses of debates in a variety of fields.
29 However, there is limited research regarding the use of debates in physical education teacher
30 education (PETE).

31 Social entrepreneurship (SE) refers to *“a process involving the innovative use and*
32 *combination of resources to pursue opportunities to catalyze social change and/or address*
33 *social needs”* (p. 37) (Mair & Martí, 2006). The past decade has witnessed a surge of SE,
34 providing important insights regarding its role in fostering inclusive growth and institutional
35 change (Saebi et al., 2019). The enhancement of SE in teacher education is important not
36 only to increase social skills and moral values in future teachers but also to improve global
37 wealth, counteract social crisis, and resolve community problems. In addition, the promotion
38 of SE in PETE would be beneficial for the whole society since PETE educators have the
39 responsibility to train culturally conscious future teachers (Flory et al., 2014), and these
40 teachers will be in a unique position to act as role models for future generations (Yager et al.,
41 2020). Previous research has supported the use of AL to encourage SE in education (Siqueira
42 et al., 2015). This suggests that debate might be an appropriate methodology to promote SE

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

43 in PE. However, our literature search reveals a lack of studies using debates to promote SE
44 (Thomsen et al., 2019). Likewise, new research regarding SE in PE and PETE is needed
45 (Capella-Peris et al., 2021).

46 A revision of Bloom's Taxonomy of Educational Objectives proposes that higher-
47 order thinking skills comprise analysis, evaluation, and creation (Anderson et al., 2001).
48 Previous research has shown that using debates enhanced these higher-order thinking skills in
49 students (Kennedy, 2009; Mumtaz & Latif, 2017), linking the effects of debating to Bloom's
50 Taxonomy. In addition, debating experience induces student involvement in important social
51 issues (Bellon, 2000), which connects debates with SE. Moreover, through debates, students
52 can share their opinions and reflect on pedagogical, personal, and social issues, reinforcing
53 their learning. This supports the inclusion of critical reflection processes in the training of
54 PETE students (Coulter et al., 2020; Kjerland & Annerstedt, 2021). Altogether, we believe
55 that using debates may be an optimal approach to achieve our desired learning outcomes in
56 PETE by promoting Bloom's Taxonomy higher-order thinking skills in relation to SE.

57 Underlying the promotion of SE through AL and debate-based strategies, this study is
58 aligned with pedagogical currents such as *critical pedagogy* and *meaningful PE*. On the one
59 hand, in recent times, there has been a steady growth of socially critical research exploring
60 how PE might contribute to, and be shaped by, cultural and social forces (Fitzpatrick, 2019).
61 This socially critical work establishes links between PE and wider social problems (Kirk,
62 2019). Although many approaches have focused on theoretical development, few of them
63 have addressed active solutions and pragmatic progress (Felis-Anaya et al., 2018). Thus, our
64 proposal aims to fill this gap. On the other hand, meaningful PE refers to the full range of
65 human experiences that hold personal significance (Kretchmar, 2007). This approach
66 prioritizes meaningful experiences for PE students, highlighting the idea that meaningfulness
67 positions PE as a way of enriching the quality of young people's lives to better suit their

68 contemporary social needs (Fletcher et al., 2021). In this sense, meaningful PE has recently
69 been identified as one area deserving of renewed attention in PE and PETE (Beni et al., 2019;
70 Quennerstedt, 2019). Therefore, our proposal is in line with both approaches since it seeks to
71 increase social value and enhance meaningful learning by promoting SE in PETE students.

72 This research aims to shed light on both issues, analyzing the impact of debate in
73 PETE and studying the promotion of SE by using debate. Another significant contribution is
74 made in our research design through the use of mixed-methods. This is an innovative
75 approach in the study of SE (Hockerts, 2017) that includes the complementary strengths of
76 both qualitative and quantitative methods (Creswell & Plano Clark, 2017).

77 **Materials and Methods**

78 **Research Settings**

79 This research was conducted at Morgan State University (USA), a recognized
80 historically black university (HBCU) in Baltimore, Maryland, and was approved by its
81 Institutional Review Board (IRB#18/02-0020). The courses included were Physical and
82 Health Education Course (PHEC) 359 Psycho-social dimensions of sports, as the
83 experimental group (EG); and PHEC 375 Psychology of teaching and coaching, as the
84 control group (CG).

85 Following a similar approach to previous research in other fields (Darby, 2007;
86 Jagger, 2013), the EG students worked on course contents previously developed by the
87 teacher, applying debate as a teaching methodology. On the other hand, the PETE students
88 from the CG completed the course by applying traditional teaching methodologies based on
89 lectures, practice sessions, and theoretical-practical exercises. All classes were conducted by
90 the same teacher.

91 **Class Activities**

92 The most well-known debate styles are Lincoln-Douglas and Oxford (Elliott et al.,
93 2016; Kennedy, 2007). Our teaching program was mainly based on these two debate styles.
94 However, additional approaches such as speed round debates (Treme, 2018), pro et contra
95 debate (Kosmatin Fras & Grigillo, 2016), and informal debates (Dy-Boarman, Nisly, et al.,
96 2018) were also implemented. In all cases, the four characteristics of argument for a true
97 debate were present: first, development of ideas and positions (i.e., description, explanation,
98 and demonstration); second, clash (i.e., refuting ideas); third, extension (i.e., defending ideas
99 against refutation); and fourth, perspective (i.e., derive essence or sum of ideas and arguments
100 and relate it to a larger question at hand) (Snider & Schnurer, 2006).

101 The course was structured into five broad debates. In the following table, we display
102 the topics and materials used to start each debate (Table 1). Additional materials, such as
103 scientific papers, newspaper articles, and website reports, were provided during in-class
104 discussions by the teacher and the students to enrich debates. In Table 2, we provide an
105 example of debate in the teaching and learning context.

106 **Design and Data Collection**

107 A convergent parallel mixed-methods design with methodological triangulation was
108 employed: QUAN+QUAL (Creswell & Plano Clark, 2017). The use of such designs has
109 previously been supported in PETE (García-Fariña et al., 2021), SE research (Mehta et al.,
110 2016), and the study of debate effects (Scannapieco, 1997). However, our implementation
111 differs from previous studies and goes a step further since it performs data transformation,
112 sentiment analyses, and combines three types of results in the discussion (Creswell & Plano
113 Clark, 2017).

114 Quantitative evidence was gathered through a quasi-experimental design using two
115 non-equivalent groups, an experimental group and a control group, contrasting pre-test and

116 post-test measures. To assess the dependent variable, the *SE Competency Scale* (SECS)
117 instrument was used (Capella-Peris, Gil-Gómez, Martí-Puig, et al., 2020). This tool allows
118 researchers to measure SE considering 17 specific features, organized in three categories.

119 The qualitative section was addressed using 18 reflective journals collected from all
120 the members of the EG. The reflective journals consisted of open essays in response to the
121 following instruction: *“Please analyze and evaluate your own performance in all course*
122 *debates and explain, in as much detail as possible, the reasons supporting that assessment,*
123 *describing experiences in class, learning acquired from these activities, and personal*
124 *opinions”*. The typical length of these reflective journals was two pages of text. These reports
125 were provided electronically and voluntarily at the end of the course, and they had no impact
126 on their grades. Following established techniques for qualitative analysis, a double procedure
127 (i.e., from inductive to deductive and back again) was applied to analyze the reflective
128 journals (Flick, 2018). Reflective journals allow researchers to study educational experiences
129 while maintaining an objective position (Pavlovich, 2007). This tool was used in previous
130 analysis of debate implementations (Seeharaj & Samiphak, 2019), teacher training and PETE
131 studies (Baker, 2021; Chiva-Bartoll et al., 2020), and entrepreneurship education research
132 (Scott et al., 2019).

133 Finally, data transformation and sentiment analyses were used to transform the
134 qualitative data into quantitative results (van Grootel et al., 2020). These are standard
135 procedures of mixed-methods research where investigators take the qualitative themes or
136 codes and count them to form quantitative measures (Creswell & Plano Clark, 2017). This
137 numerical translation has often been used for results verification purposes, pattern
138 recognition, and complementation with qualitative findings (Sandelowski et al., 2009).
139 Although data transformation may be considered controversial in some circles, this approach
140 provides several advantages (Maxwell, 2010). In our case, while the qualitative section

141 assesses the importance and depth of the PETE students' discourse, data transformation and
142 sentiment analyses provide a complementary view of their comments by evaluating the
143 frequency of citations and sentiment trends, respectively. Data transformation has previously
144 been implemented in Education (Plano Clark et al., 2010) and in PETE studies (Capella-
145 Peris, Gil-Gómez, & Chiva-Bartoll, 2020). Likewise, there are also precedents for sentiment
146 analysis in mixed-methods research (Salvador-García et al., 2020).

147 **Data Analysis**

148 For quantitative analysis, Cronbach's Alpha test, Levene's test, the *t*-test, and
149 Pearson's test were performed. These tests were conducted on three levels, in general, by
150 categories, and by features of the SECS. When necessary, the effect size was calculated using
151 Cohen's *d* value, which may be interpreted as trivial ($d \leq 0.2$), small ($0.2 < d < 0.5$), medium
152 ($0.5 < d < 0.8$), or large ($0.8 < d$) (Cohen, 1992). The IBM SPSS v.26 software package (IBM
153 Corp., Armonk, NY) was used in this analysis.

154 Qualitative analysis was undertaken, analyzing the 18 reflective journals provided by
155 the EG students. Inductive analysis was open-coding, while the deductive phase was based on
156 the categories and features of the SECS. NVivo version 12.6 software (QSR International Pty
157 Ltd., Doncaster, VIC, Australia) was used in this analysis.

158 Data transformation and sentiment analysis displayed the frequency of reflective
159 journal excerpts, counting the number of citations related to the categories and features of the
160 SECS as well as positive and negative sentiments. To perform data transformation, the
161 number of times each category and feature was mentioned in reflective journals was counted.
162 When conducting sentiment analysis, all comments were labeled and counted as either
163 "positive" or "negative". Those counts were used to calculate the average and the percentage
164 of citations for each category, feature, and sentiment. When necessary, percentage scores
165 were normalized. These analyses were conducted on three levels, globally (i.e., analyzing all

166 data for each category and feature), by reflective journal (i.e., assessing the records provided
167 for each participant individually), and by sentiment (i.e., indicating the frequency of citation
168 for positive and negative comments). NVivo version 12.6 software (QSR International Pty
169 Ltd., Doncaster, VIC, Australia) was used in these analyses.

170 **Hypothesis and Research Question**

171 The specific hypothesis to be tested was *Applying debates as a teaching methodology*
172 *will produce a significant improvement ($p < 0.05$) in the SECS results for the EG compared*
173 *with the CG*. Furthermore, the main question needing a response in this research is *How will*
174 *debates affect PETE students' perspectives in terms of their experience and learning related*
175 *to SE?*

176 **Participants**

177 The study used an incidental-type non-probabilistic sample, with the sample selection
178 matched to the class groups. In the following table, we display demographic information
179 about the study participants (Table 3). There were no statistical differences between groups in
180 terms of age, race, or gender.

181 **Results**

182 **Quantitative Analysis**

183 A value of $\alpha = 0.902$ was obtained for Cronbach's Alpha test, showing excellent
184 internal consistency. A value of $t(58) = 1.581$, $p > 0.05$ was obtained for Levene's test;
185 therefore, the groups compared were considered equal. The values obtained when applying
186 the t -test for paired samples were $t(29) = 7.780$, $d = -1.437$, $p < 0.001$ for the EG and $t(29) = -$
187 0.889 , $d = 0.113$, $p = 0.382$ for the CG, respectively. Hence, there was a significant difference
188 between pre-test and post-test measures in the EG. No difference was reported for the CG.
189 Effect sizes were large for the EG and trivial for the CG. These results were also found in the
190 category analysis.

191 Additionally, the feature analysis displayed significant differences between pre-test
192 and post-test measures for *ability to take risks* ($p<0.05$) and *ability to create ideas* ($p<0.001$)
193 in the EG. Once again, no significant differences were reported for the CG. In the general
194 analysis a value of $t(58)=-3.711$, $p<0.001$ was obtained for the post-test/post-test comparison.
195 Therefore, there was a significant difference between post-test measures when comparing the
196 EG with the CG. The category analysis revealed a significant difference for *innovative*
197 *features* ($p<0.05$) and the feature analysis displayed significant differences for *initiative*
198 ($p<0.05$) and *ability to change* ($p=0.001$) in the post-test/post-test comparison.

199 Finally, three significant records out of three were found for the category when
200 applying Pearson's test, all of which were positive and had a significance level of $p<0.05$ and
201 a moderate degree of correlation ($0.4\leq r_p<0.6$). The feature analysis revealed 26 significant
202 records out of 136, which had significance levels of $p<0.01$ for nine cases and $p<0.05$ for 17
203 cases. The degrees of correlation were very high ($0.8\leq r_p<1$) for one case, high ($0.6\leq r_p<0.8$)
204 for seven cases, and moderate ($0.4\leq r_p<0.6$) for 18 cases.

205 **Qualitative Analysis**

206 To facilitate the comparison and combination of qualitative and quantitative data
207 (Plano Clark, 2019), this section is organized according to the SECS features, which were
208 used in the deductive phase. Also, we offer examples of an additional theme and positive-
209 negative sentiments, which were identified in the inductive phase. All extracts include the
210 informant's reference code. The selection of these quotes is related to their importance and
211 depth to highlight the students' experiences in each case.

212 ***Resilience***

213 Students were not used to using debates as a teaching methodology, which caused many
214 doubts and misunderstandings at the beginning of the course: "*Well I'm not going to lie, I*
215 *started the semester off weak in your classes because I wasn't used to the way you teach*"

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

216 (C15.Ref.3). However, they were encouraged to face and solve these issues, enhancing their
217 ability to recover from troubles: *“I truly appreciated Dr. Capella-Peris encouraging me to*
218 *use my voice more and speak up in the classroom. As the semester progressed, I started to*
219 *speak up more in the class and give more of my opinion. I became more confident and*
220 *learned quite a bit as my opinions were challenged by my classmates”* (C12.Ref.1).

221 **Goal-oriented motivation**

222 Once the students got involved in the course dynamic, they applied several strategies to
223 participate in the course, for example: *“I have tried to introduce interesting topics that*
224 *would be engaging amongst my class mates”* (C04.Ref.2); *“I believe that I went in*
225 *depth on all the topics as I talked about what we discussed in class following up on*
226 *what I researched on the topic”* (C07.Ref.1); *“I have tried to examine the topics we*
227 *have discussed from a variety of angles, instead of just my own”* (C12.Ref.1), etc.

228 Altogether, this shows their interest and motivation to learn throughout the course.

229 **Ability to learn and evolve**

230 Students were forced out of their comfort zones many times while debating, which produced
231 some uncomfortable feelings during the course: *“This is the hardest class I have taken so far,*
232 *and I am thankful. This class took me out of my comfort zone and forced me to receive points*
233 *in an unconventional way”* (C02.Ref.1). Therefore, they took advantage of this situation to
234 develop useful competencies such as critical thinking, analytical skills, and problem solving:
235 *“The style of open discussion and debate in class allowed me to express my opinions,*
236 *reaffirm believes, and adopt new ways of thinking”* (C14.Ref.1).

237 **Confidence**

238 Some students felt unconfident due to being challenged by their peers and/or the teacher: *“I*
239 *did try to speak in class and engage. I didn’t do it as often because I noticed a lot of people*
240 *would sound like they were arguing so I didn’t want to argue”* (C10.Ref.1.). Nevertheless, by

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

241 the end of the semester, they were satisfied and assured regarding their progress, both
242 academically and personally: *“I have also learned to stay grounded in my beliefs, and if I feel
243 someone is not hearing my point to not get frustrated but try to find different ways to show
244 them so they can understand”* (C08.Ref.3.).

245 ***Social awareness***

246 Discussions through debates forced students to analyze different opinions and their
247 implications: *“The topics we discussed (race, gender, violence in sport) were important and
248 affected everyone in our class. It was impossible to sit in the class and not express opinions
249 on these important subjects”* (C14.Ref.1). This enhanced the promotion of social values in
250 students (e.g., respect, empathy, justice, honesty, etc.), displaying civic behaviors towards
251 peers, family members, and the teacher: *“I know you have come from a different place and
252 having to adjust to our customs was very difficult, but you did well for your first year at an
253 HBCU. I hope to stay here for many years and educate all of my African American brothers
254 and sisters”* (C15.Ref.2.).

255 ***Commitment and coherence***

256 Discussing topics according to the students’ interests increased their motivation and
257 implication during class debates: *“I really enjoy this class so participating in talking about
258 the topics we researched was not hard for me”* (C11.Ref.1.). The most productive topics were
259 ‘Race & Sport’ and ‘Gender & Sport’, which makes sense considering they were
260 predominantly male PETE students from an HBCU institution: *“My favorite one was the
261 race topic because it allowed me to really get in touch with my culture and talk about how I
262 felt race played an important role in sports”* (C09.Ref.1.).

263 ***Students’ appreciation-gratitude (additional theme)***

264 One new theme arose from the inductive phase, which included feelings of appreciation: *“the
265 experience was a great opportunity for me to showcase my academic talent and I appreciate*

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

266 *the opportunity to do just that*” (C02.Ref.1.); and gratitude: *“you constantly said you want us*
267 *to think outside of our own mind and see and understand views from other perspectives. You*
268 *taught me how to do that and I cannot thank you enough*” (C08.Ref.4.).

269 ***Positive sentiments***

270 Many positive comments were recorded in the reflective journals. Most of them
271 focused on the teaching methodology employed and the learning outcomes achieved:
272 *“Being a student in the course of PHEC 359 was quite enjoyable and helped to learn*
273 *the outcomes of this course*” (C17.Ref.1); and the new points of view provided: *“I*
274 *learned about how racism and sports are connected (...) Not only has racism changed*
275 *NFL, but more importantly changed my views of the NFL (...) Without your class, I*
276 *would have never thought, or even consider about looking into sports a different way*
277 *and getting deeper into sports*” (C13.Ref.1).

278 ***Negative sentiments***

279 The course dynamic also generated some critical voices. Most of these criticisms were
280 based on students’ own participation: *“I believe that I could have done better. I could*
281 *have talked more and came up with more interesting points/topics in the beginning in*
282 *the semester*” (C16.Ref.1). In addition, there were a few criticisms regarding the
283 interest of the topics discussed as well as the duration and management of the debates:
284 *“There were times where I felt topics were very miscellaneous with no concrete*
285 *substance. My participation varied depending on the topic. If we discussed something*
286 *continuously several times, I felt no need to give an opinion because it was like playing*
287 *a broken record over and over. At times I felt my professor chose not to understand my*
288 *opinions, though my peers understood my statements and analogies perfectly*”
289 (C18.Ref.1).

290 **Data Transformation and Sentiment Analyses**

291 This section includes the results for global analysis, comprising data for each category
292 and feature from all participants (Figure 1), and sentiment analysis, indicating the frequency
293 of citation for positive and negative comments from all the reflective journals (Figure 2). To
294 limit paper extension, the results from the analysis by reflective journal are available from the
295 corresponding author upon request.

296 **Discussion**

297 The mixed-methods approach offers a great opportunity to analyze the impact of
298 debates in PETE and study the promotion of SE by using debates. When considered as
299 parallel sources of information, the quantitative data, qualitative data, and data transformation
300 yield results that may explain or confirm one another. Table 4 explicitly relates the three types
301 of data to identify points of agreement. These records represent a new benchmark in SE
302 research since no previous studies analyzing the effect of debates in the field were found. In
303 addition, our results are consistent with several investigations that used different AL
304 methodologies to encourage entrepreneurship education (Cooper et al., 2004; San Tan & Ng,
305 2006) and SE (Chang et al., 2014; Siqueira et al., 2015).

306 Regarding category analysis, the quantitative results revealed significant
307 improvements in the EG and large effect sizes for all three cases (i.e., personal features,
308 social features, and innovative features categories), while no changes were found for the CG.
309 The category of *innovative features* recorded the highest *t* value and displayed significant
310 differences between the EG and CG in post-test measures. This indicates that *innovative*
311 *features* reflected improvement better than the other categories, agreeing with previous
312 research regarding the use of debates (Elliott et al., 2016; Lantis, 2004). However, the most
313 interesting comments from the qualitative analysis were linked to *social issues*, suggesting a
314 deeper influence in this category (Baum, 2018; Shreffler, 2020). On the other hand, the

315 category with the highest percentage of comments on data transformation was *personal*
316 *features*. This result underlines a greater impact of debates on personal perspective, which is
317 in line with several previous studies in terms of the effects of debates (Jagger, 2013;
318 Kennedy, 2009; McGee et al., 2020). These differences highlight the value of addressing the
319 study using a mixed-methods approach so as not to miss important implications.

320 The feature analysis registered significant improvements for *ability to take risks* and
321 *ability to create ideas* in the EG. This is in accordance with previous research regarding the
322 impact of debates, reporting that students faced the fear of participating in debates (Kennedy,
323 2009) and opened new avenues of thinking to express their views (Oros, 2007), respectively.
324 Once again, no changes were reported for the CG. Besides, post-test measures for *initiative*
325 and *ability to change* were significantly higher for the EG compared to the CG, coinciding
326 with previous debate findings in terms of increased active and voluntary participation by
327 students (Lantis, 2004; Ramlan et al., 2016) as well as adapting their opinions and attitudes
328 (Kudinova & Arzhadeeva, 2020). The qualitative results highlighted the contribution of
329 debates in terms of *resilience* and *ability to learn and evolve*. This may be a consequence of
330 dealing with conflict and facing failure while debating (Seeharaj & Samiphak, 2019;
331 Shreffler, 2020) and the enhancement of academic content, learning knowledge, and practical
332 skills (Arrue et al., 2017), respectively. In addition, reflective journals described interesting
333 experiences linked to *leadership* and *social awareness*, for example, in addition to leading in-
334 class discussion or mentoring peers (Elliott et al., 2016; Shreffler, 2020) and by growing
335 awareness of current events and ethical sensibility (Jagger, 2013). Finally, the features with
336 the highest average number of comments on data transformation were *confidence* and
337 *commitment and coherence*. This is supported by previous studies displaying more
338 confidence (Dy-Boarman, Bryant, et al., 2018; McGee et al., 2020) as well as engagement
339 and involvement (Baum, 2018) due to the use of debates. Records on data transformation for

340 *goal-oriented motivation* and *ability to identify opportunities* were also remarkably high. This
341 agrees with previous findings of increased interest and motivation to learn (Kosmatin Fras &
342 Grigillo, 2016; Scannapieco, 1997) and the recognition of new opportunities to work on or
343 practice (Elliott et al., 2016; Mumtaz & Latif, 2017). Despite having a moderate impact in
344 our research, interesting precedents regarding the use of debates were also found for
345 *creativity* (Seeharaj & Samiphak, 2019), *offering help and cooperation* (Alén et al., 2015;
346 Hendrickson, 2019), *coexistence and respect for public affairs* (Shreffler, 2020),
347 *responsibility* (Darby, 2007), and *belonging to well-informed social networks* (Lantis, 2004).
348 As before, these records establish a new standard for SE research.

349 Correlation analyses displayed numerous and significant connections between SE
350 categories and features, suggesting they were enhanced as a whole concept rather than being
351 fostered independently. This was supported by the qualitative data, where the relationships
352 between features became evident. On the contrary, data transformation analysis based on the
353 reflective journals exposed different records when comparing participants. This points to a
354 different effect of debates among PETE students. Thus, future research might analyze how
355 and why SE categories and specific features may be promoted differently among PETE
356 students. Finally, sentiment analysis revealed that comments were mostly positive (77% of
357 total count), a trend that was consistent for all categories and specific features. Apart from the
358 learning and features developed, positive comments described the participants' enjoyment
359 and satisfaction. This effect of debates is widely reported in previous studies (Baum, 2018;
360 Hendrickson, 2019). Negative experiences focused on students' participation and interest in
361 the topics (Alén et al., 2015), the deepness of the discussion and the students' preparation
362 (Wachenchauzer, 2004), and some objections regarding the format and weight of debates
363 (Oros, 2007). As the precedents confirm, special attention should be paid to these issues in
364 future debate implementations.

365 Finally, we propose the following recommendations to make PETE programs more
366 effective in terms of SE promotion and meaningful and critical learning by using debates:

- 367 1) PETE educators should select topics according to the students' interests as well as
368 providing them with opportunities to see reality from different perspectives (e.g.,
369 gender, race, violence, etc.).
- 370 2) A clear social approach will be needed to increase concepts such as SE (e.g.,
371 trying to connect the topics discussed with students' own social reality from a
372 general perspective).
- 373 3) Particular elements of the context such as the educators' and students'
374 positionalities, the specific curriculum of each PETE program, and the learners'
375 previous experiences should be considered when planning and implementing this
376 teaching approach (e.g., analyzing the students' background).
- 377 4) Several strategies can be applied to increase debate discussion (e.g., challenging
378 students while debating by posing critical questions, analyzing different opinions
379 and their implications, developing new arguments for discussion, etc.).
- 380 5) It is important to ensure the connection between topics, materials, and contents at
381 all steps.

382 Considering these five recommendations, we encourage all PETE educators to adopt a
383 more active position by using AL and a debate-based approach in order to promote SE as well
384 as meaningful and critical learning.

385 **Conclusion**

386 In summary, debates as a teaching methodology produced an outstanding
387 improvement in social entrepreneurship in physical education teacher education students.
388 This conclusion is consistent with several studies regarding the implementation of debates in
389 other fields. The results lead us to accept the H_1 hypothesis and provide a comprehensive

390 answer to the research question. These results represent new findings in the research field. As
391 a limitation, we acknowledge that the course content (i.e., psycho-social dimensions of
392 sports) represented an ideal match for the use of debates. Hence, these results may be more
393 difficult to obtain in different courses (e.g., teaching sports). From a quantitative perspective,
394 the limited sample size represents another limitation of this research. However, this was
395 minimized by using a mixed-methods study design. Lastly, qualitative data was only
396 collected from the EG since the qualitative research approach specifically focuses on a deeper
397 interpretation and understanding of the phenomena experienced by participants, instead of
398 comparing results between experimental and control groups (Flick, 2018). Therefore, to
399 overcome these potential limitations, it is proposed that future research should be conducted
400 to confirm the effects of debates as a teaching methodology in other courses of physical
401 education and sport sciences, with larger sample sizes and varied research designs.

402 **Acknowledgments**

403 The authors acknowledge the support provided by Morgan State University
404 colleagues and students. This work was supported by Consejo Superior de Deportes under
405 grant PROYECTO-RED 03/UPB/20, RIADIS-TRANS.

406 **References**

- 407 Alén, E., Domínguez, T., & De Carlos, P. (2015). University students perceptions of the use
408 of academic debates as a teaching methodology. *Journal of Hospitality, Leisure, Sport
409 and Tourism Education, 16*, 15–21. <https://doi.org/10.1016/j.jhlste.2014.11.001>
- 410 Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E.,
411 Pintrich, P. R., Raths, J., & Wittrock, M. C. (Eds.). (2001). *A taxonomy for learning,
412 teaching, and assessing: a revision of Bloom's taxonomy of educational objectives*.
413 Addison Wesley Longman.
- 414 Arrue, M., Unanue, S., & Merida, D. (2017). Guided university debate: effect of a new

- 415 teaching-learning strategy for undergraduate nursing students. *Nurse Education Today*,
416 59, 26–32. <https://doi.org/10.1016/j.nedt.2017.08.011>
- 417 Baker, K. (2021). Developing principles of practice for implementing models-based practice:
418 a self-study of Physical Education Teacher Education practice. *Journal of Teaching in*
419 *Physical Education*, 1–9. <https://doi.org/10.1123/jtpe.2020-0304>
- 420 Baum, E. J. (2018). Learning space design and classroom behavior. *International Journal of*
421 *Learning, Teaching and Educational Research*, 17(9), 34–54.
422 <https://doi.org/10.26803/ijlter.17.9.3>
- 423 Bellon, J. (2000). A research-based justification for debate across the curriculum.
424 *Argumentation and Advocacy*, 36(3), 161–175.
425 <https://doi.org/10.1080/00028533.2000.11951646>
- 426 Beni, S., Ní Chróinín, D., & Fletcher, T. (2019). A focus on the how of meaningful physical
427 education in primary schools. *Sport, Education and Society*, 24(6), 624–637.
428 <https://doi.org/10.1080/13573322.2019.1612349>
- 429 Capella-Peris, C., Gil-Gómez, J., & Chiva-Bartoll, Ò. (2020). Innovative analysis of service-
430 learning effects in physical education: a mixed-methods approach. *Journal of Teaching*
431 *in Physical Education*, 39(1), 102–110. <https://doi.org/10.1123/jtpe.2019-0030>
- 432 Capella-Peris, C., Gil-Gómez, J., Martí-Puig, M., & Ruíz-Bernardo, P. (2020). Development
433 and validation of a scale to assess social entrepreneurship competency in higher
434 education. *Journal of Social Entrepreneurship*, 11(1), 23–39.
435 <https://doi.org/10.1080/19420676.2018.1545686>
- 436 Capella-Peris, C., Martí-Puig, M., Salvador-García, C., & Maravé-Vivas, M. (2021). Social,
437 personal, and innovative competencies effect of service-learning in Physical Education
438 Teacher Education: a mixed-methods analysis. *Frontiers in Education*, 6, art. 757483.
439 <https://doi.org/10.3389/feduc.2021.757483>

- 440 Chang, J., Benamraoui, A., & Rieple, A. (2014). Learning-by-doing as an approach to
441 teaching social entrepreneurship. *Innovations in Education and Teaching International*,
442 *51*(5), 459–471. <https://doi.org/10.1080/14703297.2013.785251>
- 443 Chiva-Bartoll, Ò., Capella-Peris, C., & Salvador-García, C. (2020). Service-learning in
444 physical education teacher education: towards a critical and inclusive perspective.
445 *Journal of Education for Teaching*, *46*(3), 1–13.
446 <https://doi.org/10.1080/02607476.2020.1733400>
- 447 Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155–159.
448 <https://doi.org/10.1037/0033-2909.112.1.155>
- 449 Cooper, S., Bottomley, C., & Gordon, J. (2004). Stepping Out of the Classroom and up the
450 Ladder of Learning: An Experiential Learning Approach to Entrepreneurship Education.
451 *Industry and Higher Education*, *18*(1), 11–22.
452 <https://doi.org/10.5367/000000004773040924>
- 453 Coulter, M., Kealey, F., Langan, S. L., McGarvey, J., & Padden, S. (2020). Seeing is
454 believing: primary generalist pre-service teachers' observations of physical education
455 lessons in Ireland and Switzerland. *European Physical Education Review*, *26*(1), 159–
456 178. <https://doi.org/10.1177/1356336X19839412>
- 457 Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods*
458 *research* (3rd Ed.). Sage Publications.
- 459 Darby, M. (2007). Debate: a teaching-learning strategy for developing competence in
460 communication and critical thinking. *Journal of Dental Hygiene*, *81*(4), art.78.
- 461 Dy-Boarman, E. A., Bryant, G. A., Herring, M. S., & Foster, K. Y. (2018). Impact of debates
462 on student perceptions and competency scores in the advanced pharmacy practice
463 setting. *Currents in Pharmacy Teaching and Learning*, *10*(1), 66–71.
464 <https://doi.org/10.1016/j.cptl.2017.09.011>

- 465 Dy-Boarman, E. A., Nisly, S. A., & Costello, T. J. (2018). It's no debate, debates are great.
466 *Currents in Pharmacy Teaching and Learning*, 10(1), 10–13.
467 <https://doi.org/10.1016/j.cptl.2017.09.016>
- 468 Elliott, N., Farnum, K., & Beauchesne, M. (2016). Utilizing team debate to increase student
469 abilities for mentoring and critical appraisal of global health care in doctor of nursing
470 practice programs. *Journal of Professional Nursing*, 32(3), 224–234.
471 <https://doi.org/10.1016/j.profnurs.2015.10.009>
- 472 Felis-Anaya, M., Martos-Garcia, D., & Devís-Devís, J. (2018). Socio-critical research on
473 teaching physical education and physical education teacher education: a systematic
474 review. *European Physical Education Review*, 24(3), 314–329.
475 <https://doi.org/10.1177/1356336X17691215>
- 476 Fitzpatrick, K. (2019). What happened to critical pedagogy in physical education? An
477 analysis of key critical work in the field. *European Physical Education Review*, 25(4),
478 1128–1145. <https://doi.org/10.1177/1356336X18796530>
- 479 Fletcher, T., Chróinín, D. N., Gleddie, D., & Beni, S. (Eds.). (2021). *Meaningful Physical*
480 *Education. An Approach for teaching and learning*. Routledge.
481 <https://doi.org/10.4324/9781003035091>
- 482 Flick, U. (2018). *An introduction to qualitative research* (6th ed.). Sage Publications.
- 483 Flory, S. B., Tischler, A., & Sanders, S. (Eds.). (2014). *Sociocultural issues in physical*
484 *education: case studies for teachers*. Rowman & Littlefield.
- 485 García-Fariña, A., Jiménez Jiménez, F., & Anguera, M. T. (2021). Do Physical Education
486 teachers use socioconstructivist communication patterns in their classes? *Journal of*
487 *Teaching in Physical Education*, 1–10. <https://doi.org/10.1123/jtpe.2020-0213>
- 488 Garrett, M., Schoener, L., & Hood, L. (1996). Debate: a teaching strategy to improve verbal
489 communication and critical-thinking skills. *Nurse Educator*, 21(4), 37–40.

- 490 <https://doi.org/10.1097/00006223-199607000-00015>
- 491 Hendrickson, P. (2019). Effect of active learning techniques on student excitement, interest,
492 and self-efficacy. *Journal of Political Science Education*, 0(0), 1–15.
493 <https://doi.org/10.1080/15512169.2019.1629946>
- 494 Hockerts, K. (2017). Determinants of social entrepreneurial intentions. *Entrepreneurship*
495 *Theory and Practice*, 41(1), 105–130. <https://doi.org/10.1111/etap.12171>
- 496 Hylton, K., & Lawrence, S. (2016). ‘For your ears only!’ Donald Sterling and backstage
497 racism in sport. *Ethnic and Racial Studies*, 39(15), 2740–2757.
498 <https://doi.org/10.1080/01419870.2016.1177193>
- 499 Jagger, S. (2013). Affective learning and the classroom debate. *Innovations in Education and*
500 *Teaching International*, 50(1), 38–50. <https://doi.org/10.1080/14703297.2012.746515>
- 501 Kennedy, R. R. (2007). In-class debates: fertile ground for active learning and the cultivation
502 of critical thinking and oral communication skills. *International Journal of Teaching*
503 *and Learning in Higher Education*, 19(2), 183–190.
- 504 Kennedy, R. R. (2009). The power of in-class debates. *Active Learning in Higher Education*,
505 10(3), 225–236. <https://doi.org/10.1177/1469787409343186>
- 506 Kirk, D. (2019). *Precarity, Critical Pedagogy and Physical Education*. Routledge.
507 <https://doi.org/10.4324/9780429326301>
- 508 Kjerland, G. Ø., & Annerstedt, C. (2021). Applying learning theories in learning how to teach
509 physical education: a study of teacher education students collaborative learning
510 processes in a project. *Sport, Education and Society*, 1–14.
511 <https://doi.org/10.1080/13573322.2021.1902799>
- 512 Kosmatin Fras, M., & Grigillo, D. (2016). Implementation of active teaching methods and
513 emerging topics in photogrammetry and remote sensing subjects. *XXIII International*
514 *Society for Photogrammetry and Remote Sensing Congress*, 87–94.

- 515 <https://doi.org/10.5194/isprsarchives-XLI-B6-87-2016>
- 516 Kretchmar, R. S. (2007). What to do with meaning? A research conundrum for the 21st
517 century. *Quest*, 59(4), 373–383. <https://doi.org/10.1080/00336297.2007.10483559>
- 518 Kudinova, N., & Arzhadeeva, D. (2020). Effect of debate on development of adaptability in
519 EFL university classrooms. *TESOL Journal*, 11(1), 1–13.
520 <https://doi.org/10.1002/tesj.443>
- 521 Lantis, J. S. (2004). Ethics and foreign policy: structured debates for the international studies
522 classroom. *International Studies Perspectives*, 5(2), 117–133.
523 <https://doi.org/10.1111/j.1528-3577.2004.00162.x>
- 524 Mair, J., & Martí, I. (2006). Social entrepreneurship research: a source of explanation,
525 prediction, and delight. *Journal of World Business*, 41(1), 36–44.
526 <https://doi.org/10.1016/j.jwb.2005.09.002>
- 527 Matthews, C. R., & Channon, A. (2017). Understanding sports violence: revisiting
528 foundational explorations. *Sport in Society*, 20(7), 751–767.
529 <https://doi.org/10.1080/17430437.2016.1179735>
- 530 Maxwell, J. A. (2010). Using numbers in qualitative research. *Qualitative Inquiry*, 16(6),
531 475–482. <https://doi.org/10.1177/1077800410364740>
- 532 McGee, E. U., Pius, M., & Mukherjee, K. (2020). Assessment of structured classroom debate
533 to teach an antimicrobial stewardship elective course. *Currents in Pharmacy Teaching
534 and Learning*, 12(2), 220–227. <https://doi.org/10.1016/j.cptl.2019.11.016>
- 535 Mehta, K., Zappe, S., Brannon, M. L., & Zhao, Y. (2016). An educational and entrepreneurial
536 ecosystem to actualize technology-based social ventures. *Advances in Engineering
537 Education*, 5(1), 1–38.
- 538 Miller, C. J., & Metz, M. J. (2014). A comparison of professional-level faculty and student
539 perceptions of active learning: its current use, effectiveness, and barriers. *Advances in*

- 540 *Physiology Education*, 38(3), 246–252. <https://doi.org/10.1152/advan.00014.2014>
- 541 Mumtaz, S., & Latif, R. (2017). Learning through debate during problem-based learning: an
542 active learning strategy. *Advances in Physiology Education*, 41(3), 390–394.
543 <https://doi.org/10.1152/advan.00157.2016>
- 544 Oros, A. L. (2007). Let’s debate: active learning encourages student participation and critical
545 thinking. *Journal of Political Science Education*, 3(3), 293–311.
546 <https://doi.org/10.1080/15512160701558273>
- 547 Pavlovich, K. (2007). The development of reflective practice through student journals.
548 *Higher Education Research & Development*, 26(3), 281–295.
549 <https://doi.org/10.1080/07294360701494302>
- 550 Plano Clark, V. L. (2019). Meaningful integration within mixed methods studies: identifying
551 why, what, when, and how. *Contemporary Educational Psychology*, 57, 106–111.
552 <https://doi.org/10.1016/j.cedpsych.2019.01.007>
- 553 Plano Clark, V. L., Garrett, A. L., & Leslie-Pelecky, D. L. (2010). Applying Three Strategies
554 for Integrating Quantitative and Qualitative Databases in a Mixed Methods Study of a
555 Nontraditional Graduate Education Program. *Field Methods*, 22(2), 154–174.
556 <https://doi.org/10.1177/1525822X09357174>
- 557 Quennerstedt, M. (2019). Physical education and the art of teaching: transformative learning
558 and teaching in physical education and sports pedagogy. *Sport, Education and Society*,
559 24(6), 611–623. <https://doi.org/10.1080/13573322.2019.1574731>
- 560 Ramlan, F. A., Kassim, N. M., Pakirisamy, S., & Selvakumar, V. (2016). The impact of
561 debates as a teaching strategy in the classroom to medical students. *E-Academia Journal*
562 *UiTMT*, 5(2), 194–203.
- 563 Saebi, T., Foss, N. J., & Linder, S. (2019). Social entrepreneurship research: Past
564 achievements and future promises. *Journal of Management*, 45(1), 70–95.

- 565 <https://doi.org/10.1177/0149206318793196>
- 566 Salvador-García, C., Capella-Peris, C., Chiva-Bartoll, Ò., & Ruiz-Montero, P. J. (2020). A
567 mixed methods study to examine the influence of CLIL on physical education lessons:
568 analysis of social interactions and physical activity levels. *Frontiers in Psychology, 11*,
569 art. 578. <https://doi.org/10.3389/fpsyg.2020.00578>
- 570 San Tan, S., & Ng, C. K. F. (2006). A problem-based learning approach to entrepreneurship
571 education. *Education + Training, 48*(6), 416–428.
572 <https://doi.org/10.1108/00400910610692606>
- 573 Sandelowski, M., Voils, C. I., & Knafl, G. (2009). On quantizing. *Journal of Mixed*
574 *Methods Research, 3*(3), 208–222. <https://doi.org/10.1177/1558689809334210>
- 575 Sanderson, J., & Gramlich, K. (2016). “You Go Girl!”: Twitter and conversations about sport
576 culture and gender. *Sociology of Sport Journal, 33*(2), 113–123.
577 <https://doi.org/10.1123/ssj.2015-0048>
- 578 Scannapieco, F. (1997). Formal debate: an active learning strategy. *Journal of Dental*
579 *Education, 61*(12), 955–961. <https://doi.org/10.1002/j.0022-0337.1997.61.12.tb03181.x>
- 580 Scott, J. M., Pavlovich, K., Thompson, J. L., & Penaluna, A. (2019). Constructive
581 (mis)alignment in team-based experiential entrepreneurship education. *Education &*
582 *Training, 62*(2), 184–198. <https://doi.org/10.1108/ET-06-2019-0113>
- 583 Seeharaj, A., & Samiphak, S. (2019). Fostering the grade 10 underprivileged students’
584 inquiring mind through science reflective journal writing and active learning. *6th*
585 *International Conference for Science Educators and Teachers 2018, 2081*, 030002.1-
586 030002.8. <https://doi.org/10.1063/1.5094000>
- 587 Shreffler, M. B. (2020). Controversial topics in the classroom: debates on ethical issues in
588 sport. *Sport Management Education Journal, 14*(1), 61–63.
589 <https://doi.org/10.1123/smej.2019-0022>

- 590 Siqueira, A. C. O., Ramos, D. P., Kelly, L., Mnisri, K., & Kassouf, P. (2015). Responsible
591 management education: active learning approaches emphasising sustainability and social
592 entrepreneurship. *International Journal of Innovation and Sustainable Development*,
593 9(2), 188–202. <https://doi.org/10.1504/IJISD.2015.068791>
- 594 Snider, A., & Schnurer, M. (2006). Many sides: debate across the curriculum. In
595 *International Debate Education Association* (Revised ed). International Debate
596 Education Association.
- 597 Thomsen, B., Muurlink, O., & Best, T. (2019). Backpack bootstrapping: social
598 entrepreneurship education through experiential learning. *Journal of Social*
599 *Entrepreneurship*, 0(0), 1–27. <https://doi.org/10.1080/19420676.2019.1689155>
- 600 Treme, J. (2018). Classroom debates: using speed rounds to encourage greater participation.
601 *College Teaching*, 66(2), 86–87. <https://doi.org/10.1080/87567555.2017.1416330>
- 602 van Grootel, L., Balachandran Nair, L., Klugkist, I., & van Wesel, F. (2020). Quantitizing
603 findings from qualitative studies for integration in mixed methods reviewing. *Research*
604 *Synthesis Methods*, 11(3), 413–425. <https://doi.org/10.1002/jrsm.1403>
- 605 Wachenchauer, R. (2004). Work in progress - promoting critical thinking while learning
606 programming language concepts and paradigms. *34th Annual Frontiers in Education*
607 *Conference, F4C*, 13–14. <https://doi.org/10.1109/fie.2004.1408650>
- 608 Woods, R. B. (2016a). Social class and sport. In *Social issues in sport* (3rd ed., pp. 337–354).
609 Human Kinetics.
- 610 Woods, R. B. (2016b). What is sport and why do we study it? In *Social issues in sport* (3rd
611 ed., pp. 3–16). Human Kinetics.
- 612 Yager, Z., Gray, T., Curry, C., & McLean, S. A. (2020). Pre-service teachers' gendered
613 attitudes towards role modelling in health and physical education. *Physical Education*
614 *and Sport Pedagogy*, 25(1), 67–78. <https://doi.org/10.1080/17408989.2019.1688774>

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

1 **Table 1.**

2 *Topics, materials, and contents used to start each debate.*

Topic	Material	Contents
Society & Sport	What is sport and why do we study it? (Woods, 2016b)	Analysis of several concepts related to sports (i.e., play forms, games, sports, and work), reasons to study sports (e.g., personal development, scholarly study, and professional practice), and subdisciplines of sport science (e.g., biophysical, psycho-social, and sociocultural).
Social class & Sport	Social class and sport (Woods, 2016a)	Analysis of social classes and their characteristics, importance of social, economic, and cultural elements in sports, sport access and sport barriers due to social class, comparison between amateur and professional sport, and possibilities of social mobility through sport.
Gender & Sport	“You Go Girl!”: Twitter and Conversations about sport culture and gender (Sanderson & Gramlich, 2016)	Analysis of discussions around gender in sports culture (e.g., women in sport, women in coaching, women’s access to male-dominated sports, etc.), after the San Antonio Spurs (NBA) hired Becky Hammon as the first full-time assistant coach in mainstream North American sport.
Race & Sport	‘For your ears only!’ Donald Sterling and backstage racism in sport (Hylton & Lawrence, 2016)	Contrast between frontstage–public and backstage–private racism, addressing several racialized controversies, unpacking the case of the ex-NBA franchise owner Donald Sterling as an example of how backstage racism works and how it can be resisted.
Violence & Sport	Understanding sports violence: revisiting foundational explorations (Matthews & Channon, 2017)	Analysis of some concepts related to violence (i.e., force and violation), contrast of several types of violence (e.g., direct, indirect, institutional, psychological, symbolic, etc.), revision of the foundational typologies of sport-related violence, and study of player violence in contemporary sociological accounts of sport.

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

4 **Table 2.**

5 *Example of a debate from the Gender & Sport topic.*

Characteristics of argument for a true debate (Snider & Schnurer, 2006)	
Development of ideas and positions	The students (or the teacher) make an initial statement (e.g., men and women are different in terms of physical performance. Therefore, a woman can not properly coach a team of men).
Clash	The (other) students deliver refuting responses (e.g., coaching relies on knowledge and experience. Thus, a woman can coach a team of men as well as any man). Students defend their ideas against refutation (e.g., male players would not respect a
Extension	woman coach because they consider this position requires high-level playing experience).
Perspective	The students (or the teacher) relate the argument to a larger issue (e.g., can we compare men's and women's experience in sport? Are women equal to men in our society?)

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

7 **Table 3.**

8 *Demographic information about the study participants.*

Group	N	Percentage	Gender	Race	Age
			<i>Male - Female</i>	<i>AA - M[†]</i>	<i>Mean (SD)</i>
EG	18	47%	12 - 6	16 - 2	21.4 (± 1.4)
CG	20	53%	11 - 9	19 - 1	22.2 (± 1.5)
Total sample	38	100%	23 - 15	35 - 3	21.8 (± 1.5)

9 [†]AA: African American; M: Mixed race

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

10 **Table 4.**

11 *Comparison of the three types of data results.*

Category	Quantitative results (*)	Qualitative results (Specific features)	Data transformation results: A (%)	Integration of results
Personal features	*	Goal-oriented motivation	1.67 (33%)	Agreement (confirmation)
		Ability to learn and evolve	0.81 (16%)	Partial (explanation)
		Confidence	1.78 (35%)	Agreement (confirmation)
Social features	*	Resilience	1.11 (14%)	Partial (explanation)
		Social awareness	0.56 (7%)	Partial (explanation)
		Commitment and coherence	1.78 (22%)	Agreement (confirmation)
Innovative features	*	-	4.72 (27%)	No match (needs more research)
New identified themes (inductive) and Sentiment analysis		Students' appreciation-gratitude	1.11^	
		Positive sentiments (deeper)	2.44 (77%)	
		Negative sentiments	0.72 (23%)	

12 * Significant differences between pre-test and post-test measures in statistical analysis.

13 A: average of citations; (%): percentages of citation for a feature within a category

14 - No remarkable results were highlighted within this category.

15 ^ This additional theme does not have a percentage since it was identified in the inductive phase of qualitative

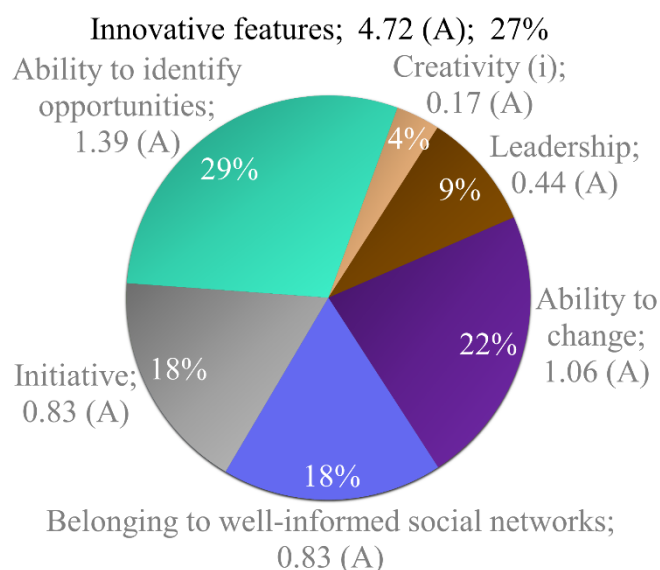
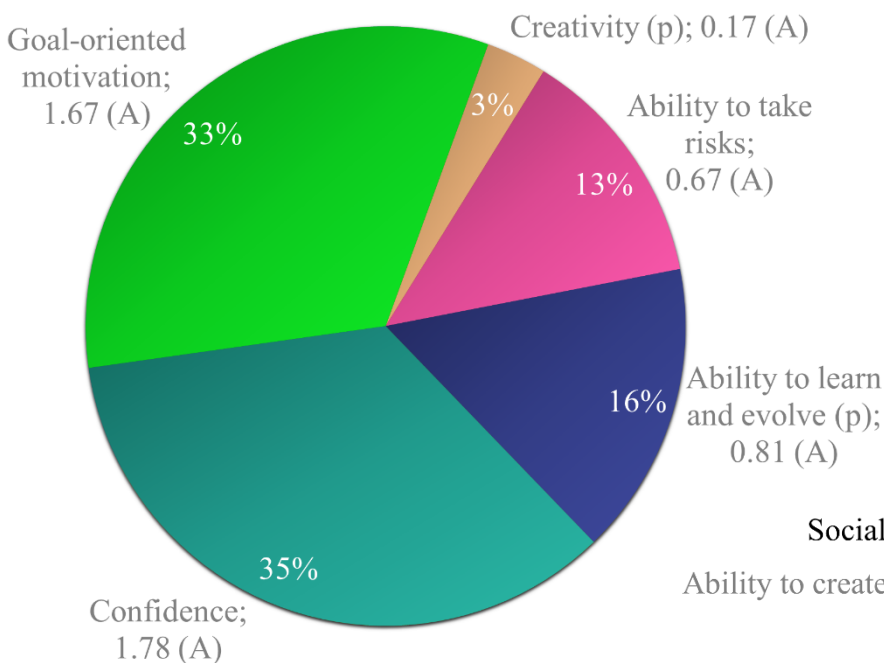
16 analysis. Therefore, there are no quantitative results to perform a comparison with these data.

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

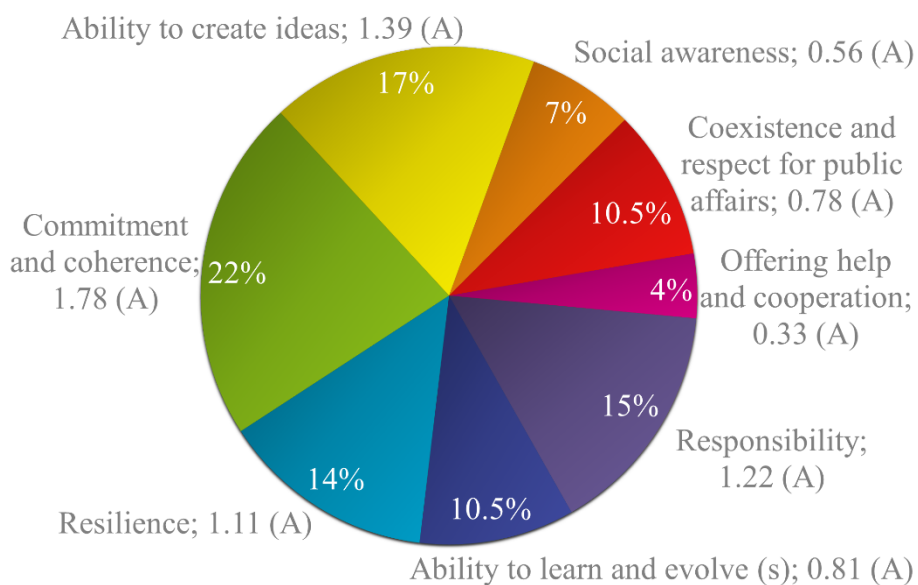
17 **Figure 1.**

18 *Global quotes of Social Entrepreneurship in the EG (n=18).*

Personal features; 5.08 (A); 40%



Social features; 7.97 (A); 33%



19 Total count (pie/slice size), average (A), and percentages (%) are displayed for each feature and category.

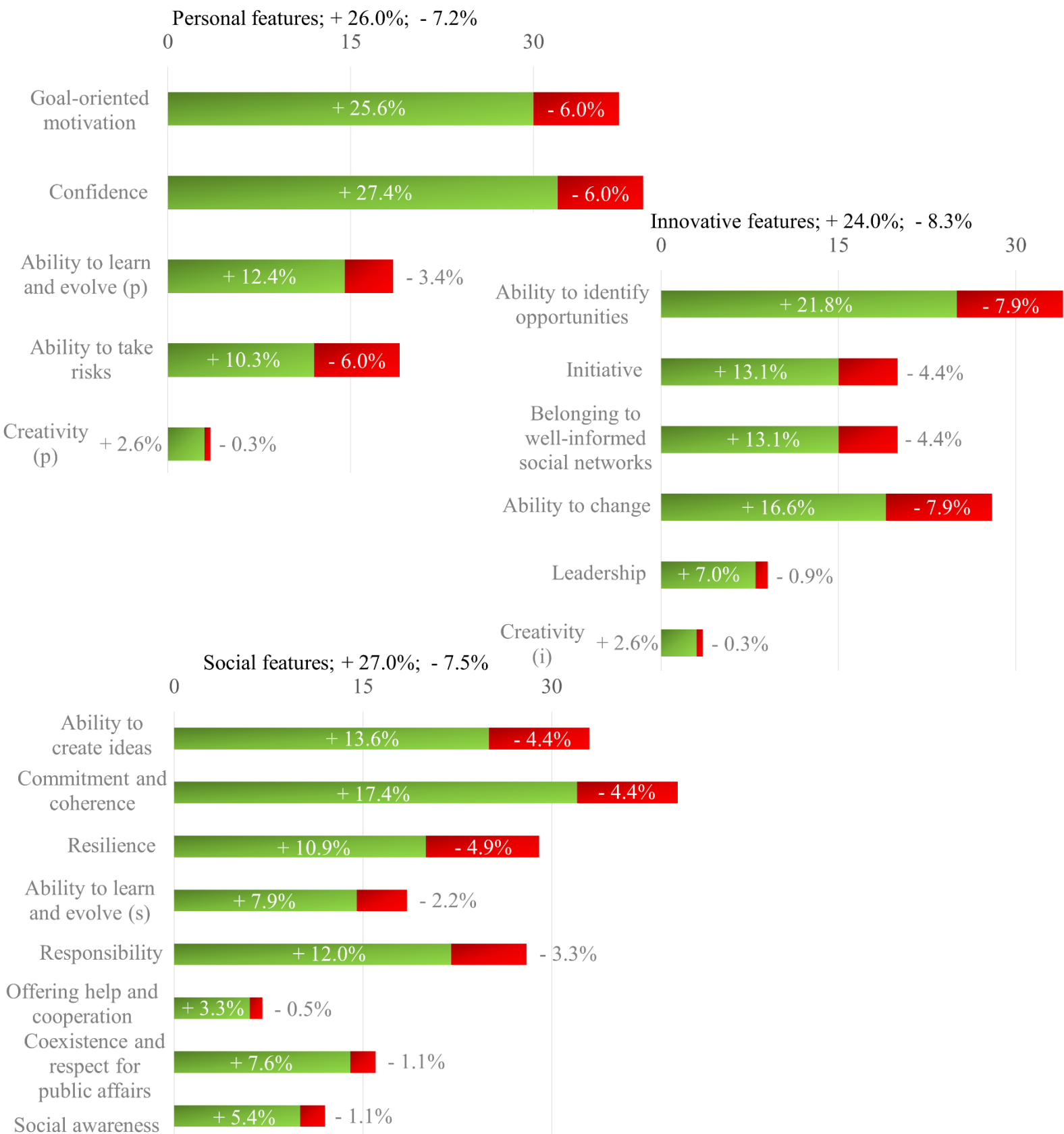
20 Category percentages were normalized given that each category has a different number of features. The size of

21 the pie charts was scaled according to their percentage of citations.

LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

22 **Figure 2.**

23 *Positive and Negative quotes regarding Social Entrepreneurship in the EG (n=18).*



LET US DEBATE! A PROPOSAL TO PROMOTE SE IN PETE

24 Total count of mentions (whole bar), with green reflecting positive comments and red reflecting negative
25 comments, and percentages (%) are displayed for each feature and category. Category percentages were
26 normalized, given that each category has a different number of features. Bar sizes were scaled according to their
27 percentage of citations.